

## ULTRASONIC PROBE

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Inventor: YAMAMOTO HIROHARU  
Applicant: FUJI ELECTRIC CO LTD; others: 01  
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### Abstract of JP2098341

**PURPOSE:** To close a contacting portion between the inner peripheral surface of a cylindrical opening portion of an acoustic window and the main body surface through a seal member by fitting a ring-like band made of elastic material to apply inward tightening force to the outer peripheral surface of the cylindrical opening of an acoustic window.

**CONSTITUTION:** An acoustic window 9 including a mechanical scanning-type vibrator and having a space contacting a part of the main body surface, which is charged with a sealing liquid, is formed by molding a thin plate member like a diaphragm, and the vicinity of the opening portion is cylindrical. A U-shaped groove is formed on the outer peripheral surface of a support 14 corresponding to the inner peripheral surface of the opening portion, and an O-ring 10 is inserted in the groove. The inner peripheral surface of the opening portion of the acoustic window 9 and the corresponding outer peripheral surface of the support 14 are brought into contact with each other at one place through the O-ring 10. When a continuous ring-like band 11 made of elastic material is fitted to the outer peripheral surface of the opening portion of the acoustic window 9, the contacting portion of the O-ring 10 is closed by the inward tightening force, so that a sealing liquid can be completely closed in co-operation with the action of the seal 4.

